ergonomic performance of the hand piece 30. By placing the memory 400 in the sheath of the end-effector, adequate electrical isolation of the circuitry in the memory 400 from the hand piece 30, the human operator thereof, and the patient is readily achieved. Also, the number of wires in cable 26 can be reduced.

IN THE CLAIMS:

Please amend the claims pursuant to 37 C.F.R. §1.121 as follows (see the accompanying "marked-up" version pursuant to §1.121):

1. (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical hand piece having an end-effector with a sheath wherein the end-effector is selected from the group consisting of a blade, shears, scissors and forceps;

a generator console for controlling the hand piece, wherein the console sends a drive current to drive the hand piece which imparts ultrasonic longitudinal movement to the blade; and

a memory disposed in the sheath of the end-effector which optimizes operation of the generator console for operation with the end effector to achieve optimal tissue effects with the end effector, wherein the console reads information stored in the memory to determine whether a copyrighted data string is present;

wherein the hand piece is authenticated for use with the console if the data string is present.

2. (Amended) A system for implementing surgical procedures comprising: an ultrasonic surgical handpiece having an end-effector,

a generator console for controlling the hand piece wherein the console sends a drive current to drive the hand piece which imparts ultrasonic longitudinal movement to the end-effector; and

a memory disposed in a portion of the end-effector selected from the group consisting of a grip, handle and mounting, said memory optimizing the generator console for operation with the end-effector to achieve optimal tissue effects with the end-effector,

wherein the console reads information stored in the memory to determine whether a data string is present;

wherein the handpiece is authenticated for use with the console if the data string is present.

3.   (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical handpiece having an end-effector;

a generator console for controlling the handpiece, wherein the console sends a drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the end-effector; and

a memory disposed within a sheath of the end-effector which optimizes the generator console for operation with the end effector to achieve optimal tissue effects with the end-effector,

wherein the console reads information stored in the memory to determine whether a data string is present, wherein the handpiece is authenticated for use with the console if the data string is present.

9.   (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical handpiece having a detachable end-effector;

a generator console for controlling the handpiece, wherein the console sends a drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the end-effector; and

a memory disposed within the end-effector, which optimizes the generator console for operation with the end-effector to achieve optimal tissue effects with the end-effector wherein the console writes historical usage and diagnostic information and configuration information into the memory;

wherein the diagnostic information are selected from the group consisting of number of activations, duration of activations, number of uses with substantial time between use, diagnostic error codes, enable use, disable use, serial number of the generator console, and serial number of the handpiece.

10.   (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical handpiece having a detachable end-effector selected from the group consisting of a blade and shears;

a generator console having a digital signal processor (DSP) for controlling the handpiece, wherein the console sends a drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the end-effector; and a memory disposed in the end-effector which optimizes the generator console for operation with the end-effector to achieve optimal tissue effects with the end-effector,

wherein the console reads the memory and determines if the end-effector has

been disabled for disabling the console from driving the end-effector.

12.   (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical handpiece having an end-effector selected from the group

consisting of a blade and shears;

a generator console having a digital signal processor for controlling the

handpiece, wherein the console sends a drive current to drive the handpiece which imparts

ultrasonic longitudinal movement to the end-effector; and

a memory disposed with the end-effector which optimizes the generator console

for operation with the end-effector to achieve optimal tissue effects with the end-effector,

wherein the console reads information stored in the memory and displays the

information and an interpretation of the information on the console display.

17.   (Amended) The system of claim 12 wherein the memory is used in conjunction

of specialized instruments selected from the group consisting of artery devices, homogenizers

and liquifiers.

32.   (Amended) A method for implementing surgical procedures in a system

including an ultrasonic surgical hand piece having an end-effector with a sheath, a console for

controlling the hand piece, and a memory disposed in the sheath of the end-effector which

optimizes the generator console for operation with the end-effector to achieve optimal tissue

effects with the end-effector, the method comprising the steps of:

reading information stored in the memory;

determining whether a copyrighted data string is present in the memory;

authenticating use of the hand piece with the console if the data string is present;

sending a drive current to drive the hand piece; and

imparting ultrasonic movement to the blade.

44.   (Amended) A system for implementing surgical procedures comprising:

an ultrasonic surgical handpiece having an end-effector;

a generator console for controlling the handpiece, wherein the console sends a

drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the

end-effector; and

a memory disposed with a sheath of the end-effector which optimizes the

generator console for operation with the end-effector to achieve optimal tissue effects with the

end-effector,

wherein the console reads information stored in the memory to determine

whether a data string is present, wherein the end-effector is authenticated for use with the

handpiece if the data string is present.